# American *Type Culture* Collection Catalogue of Cell Lines and Hybridomas Seventh Edition, 1992

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Cover photographs: The top four photographs are a montage of human small cell lung carcinoma cells. Clockwise from upper left: spheroid in culture showing central necrosis (Type I); cultured amorphous, floating cellular aggregates (Type II); xenograft, the histopathology of which closely resembles that shown by the original tumor; stained cultured cells with morphology characteristic of small cell lung carcinoma. (Photos courtesy of Dr. Adi Gazdar, University of Texas, Southwestern Medical Center and Dr. Desmond N. Carney, Department of Medical Oncology, Mater Misericordiae Hospital, Dublin, Ireland.) At the bottom is a DNA fingerprint of ATCC HTB 120 and HTB 119 derived using the pYNH24 probe for cell line identification. Both HTB 120 and HTB 119 are human small cell carcinomas of the lung donated by Dr. Adi Gazdar. The DNA characterization was performed by ATCC staff members Dr. Yvonne Reid and Christine White (Photo by W. Siegel, ATCC Cell Culture Department).

### HYBRIDOMAS — TIB

tumor-associated surface marker for BALB/c 3T3 cells transformed by the Kirsten strain f murine sarcoma virus. Cell surface glycolipids have been implicated as regulators of the cell cycle and cell growth and also as receptors f r toxins and hormones. Antibodies fr m this cell line have been used for serotherapy of mouse lymphomas. This hybridoma was formed by the fusion of NS-1 myeloma cells with spleen cells from BALB/c mice immunized with asialo GM<sub>2</sub> noncovalently adsorbed to naked Salmonella minnesota. References: J. Exp. Med. 150: 1008-1019, 1979; Science (Washington, DC) 211: 487-489, 1981. Submitted by: W.W. Young, Jr., University of Virginia Medical School, Charlottesville, VA. Note: This material is available under the conditions that you will not use it for commercial purposes or distribute it to third parties. Please see pages xv and xvi for the form required.

ATCC TIB 188 L11/135 (Anti rabbit T cells)

Current medium for propagation: Modified Dulbecco's medium, 90%; fetal bovine serum, 10%. Additional Informati n: This hybridoma secretes an IgG<sub>1</sub> antibody which is specific for a differentiation antigen present on all rabbit T cells. The ability of rabbit spleen cells to respond to Con A, PHA, or to allogeneic splenocytes resides in the population recognized by L11/135. This antibody can be used for the purification of T cell-free lymphoid populations by direct panning techniques. The L11/135 hybridoma was formed by fusing spleen cells of mice immunized with cell surface glycoproteins of the rabbit T cell line RL-5 with P3X63Ag8-U1. Reference: J. Exp. Med. 157: 34, 1983. Submitted by: S. Jackson, NIAID, NIH, Bethesda, MD.

Current medium for propagation: RPMI 1640, 85%; fetal bovine serum, 15%. Additional Information: This hybridoma secretes an IgM antibody which is specific for glycosphingolipids having the nonreducing terminal N-acetyllactosamine structure. Antibodies from this cell line are specific for the nonreducing terminal N-acetyllactosamine (Gal  $\beta$ 1  $\rightarrow$  4GIcNAc  $\beta$ 1  $\rightarrow$  R) structure and do not react with glycolipids having either a Type I chain (Gal  $\beta$ 1  $\rightarrow$  3G1cNAc  $\beta$ 1  $\rightarrow$  R), a ganglioseries structure (Gal  $\beta$ 1  $\rightarrow$  3GalNAc  $\beta$ 1  $\rightarrow$  R), or a sialosyl or fucosyl substitution at the N-acetyllactosamine residue. This hybridoma was formed by the fusion of the NS-1 myeloma with spleen cells from BALB/c mice which had been immunized with lacto-N-nor-hexaosylceramide noncovalently adsorbed to naked Salmonella minnesota. Because of its narrow, well defined specificity, this monoclonal anti-carbohydrate reagent will be useful in the study of the distribution, quantity, and function of specific carbohydrates on the cell surface. Reference: J. Biol. Chem. 256: 10967-10972, 1981. Submitted by: W.W. Y ung, Jr., University of Virginia Medical School, Charlottesville, VA. Note: This material is available under the conditions that you will not use it for commercial purposes or distribute it to third parties. Please see pages xv and xvi for the form required.

ATCC TIB 191 (Anti 2,4,6-trinitrophenyl)

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Current medium for propagation: RPMI 1640, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma produces a mouse monoclonal IgG<sub>1</sub> antibody which is reactive with TNP and forms rosettes with TNP-sheep red blood cells. This hybridoma was formed by the fusion of the mouse myeloma line P3X63Ag8.653 with spleen cells from BALB/c mice immunized with TNP-KLH. Submitted by: H. Nariuchi, Institute of Medical Science, University of Tokyo, Tokyo, Japan. Price Code: J

ATCC TIB 194 2F.11.15 (Anti 2,4,6-trinitrophenyl)

Current medium for propagation: RPMI 1640, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma produces a mouse monoclonal IgA antibody which is reactive with TNP. This hybridoma was formed by the fusion of the mouse myeloma cell line P3X63Ag8.653 with spleen cells from BALB/c mice immunized with TNP-KLH. Submitted by: H. Nariuchi, Institute of Medical Science, University of Tokyo, Tokyo, Japan.

Price Code: J

ATCC TIB 198 PI 153/3 (Anti human neuroectoderm derived tumors)

Current medium for propagation: Dulbecco's modified Eagle's medium with 4.5 g/L glucose, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma produces a monoclonal IgM antibody directed against a glycoprotein present on human neuroectoderm derived tumors (neuroblastomas, retinoblastomas and glioblastomas), fetal brain and B-cell and null leukemias but not on adult brain or other types of tumors. This hybridoma was formed by fusing the myeloma cell line P3X63Ag8 with spleen cells from C57BL/6 mice immunized with the human neuroblastoma line IMR6. Prior to injection, IMR6 cells were antibody coated by incubating the cells with hyperimmune mouse serum directed against the human lymphoblastoid line 8866. Reference: Science (Washington, DC) 203: 1120-1121, 1979. Originator: R. Kennett, University of Pennsylvania, Philadelphia, PA. Note: This material is available under the conditions that you will not use it for commercial purposes or distribute it to third parties. Please see pages xv and xvi for the form required.

TCC TIB 200 HNK-1 (Anti human NK and K cells)

Current medium for propagation: RPMI 1640 with 0.02 mM 2-mercaptoethanol, 80%; fetal bovine serum, 20%. Additional Information: This hybridoma secretes a monoclonal IgM  $\kappa$  antibody which recognizes a homogeneous population of human blood lymphocytes having both natural killer (NK) and antibody-dependent killer (K) cell function. This hybridoma was formed by the fusion of the myeloma line P3X63Ag8.653 with spleen cells from BALB/c mice immunized with a membrane extract of the human lymphoblastoid cell line HSB-2. References: J. Immunol. 127: 1024-1029, 1981; J. Exp. Med. 155: 321-326, 1982. Originators: T. Abo and C. Balch, University f Alabama, Birmingham, AL. Note: This material is available the conditions that you will not use it for commercial purposes or distribute it to third parties. Please see pages and xvi for the form required.

## CCL and CRL Hybridomas

ATCC CL 189 HK-PEG-1 (formerly PEG1-6) (Anti influenza virus, mouse)

Current medium for propagation: Iscove's modified Dulbecco's medium, 90%; fetal bovine serum, 10%. Additional Information: The hybridoma cell line HK-PEG-1 secretes a mouse monoclonal antibody (IgG<sub>3</sub>) that reacts with influenza virus. The line was produced by fusing P3X63Ag8 myeloma cells with spleen cells from BALB/c mice that had been immunized with influenza virus (A.PR/8/34). References: U.S. Pat. 4,196,265; Proc. Natl. Acad. Sci. USA 74: 2985-2988, 1977. Depositor: Wistar Inst., Philadelphia, PA. Note: This material is cited in a U.S. Pat. and may not be used to infringe the patent claims.

Price Code: H

ATCC CRL 1520 A2B5 clone 105 (Anti retinal neuron glycolipid, chick)

Current medium for propagation: Dulbecco's modified Eagle's medium with 4.5 g/L glucose, 90%; fetal bovine serum, 10%. Additional Information: The lymphocyte hybrid cell line A2B5 clone 105 produces monoclonal antibody that reacts with a glycolipid antigen localized on cell bodies of chick retinal neurons. The antigen was also found in chicken embryo brain, spinal cord and dorsal root ganglia neurons and in bovine and human brain. Initial studies suggest that the antigen is a complex ganglioside on the plasma membranes of retinal neuron cell bodies but not on axons or dendrites. The cells have a functional life expectancy of approximately 30 passages. Reference: Proc. Natl. Acad. Sci. USA 76: 4913-4917, 1979. Submitted by: G.S. Eisenbarth, Duke University, Durham, NC; M. Nirenberg, NIH, Bethesda, MD.; F. Walsh, Institute of Neurology, National Hospital Green's Square, London, England.

ATCC CRL 1605 HFN 36.3 (Anti fibronectin)

Current medium for propagation: Dulbecco's modified Eagle's medium, 90%; newborn calf serum, 10%. Additional Informati n: The HFN 36.3 is one of several hybridomas developed by R. Schoen, K. Bentley and R. Klebe (See ATCC CRL 1606) which produce monoclonal antibody to human fibronectin. The antibody produced by the HFN 36.3 cross-reacts with the fibronectins of 26 diverse species including 15 other primates. The antibody can be used to quantitate fibronectins derived from a wide variety of species. The cell line has been in culture for over a year and has remained functional during this period. Reference: Hybridoma 1: 99-108, 1982. Submitted by: R.C. Schoen, K. Bentley and R.J. Klebe, University of Texas, Health Science Center, San Antonio, TX.

ATCC CRL 1606 HFN 7.1 (Anti human fibronectin)

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Current medium for propagation: Dulbecco's modified Eagle's medium, 90%; newborn calf serum, 10%. Additional Information: The HFN 7.1 is one of several hybridomas developed by R. Schoen, K. Bentley and R. Klebe (See ATCC CRL 1605) which produce monoclonal antibody to human fibronectin. The antibody produced does not cross-react with fibronectins from 26 other diverse species tested including 15 other primates. The HFN 7.1 antibody inhibits cells' attachment to collagen by interfering with the interaction of fibronectin and cell surface receptors but does not block the ability of fibronectin to bind to collagen. The HFN 7.1 was re-cloned just before submission to the ATCC and should provide a valuable t ol with which to study fibronectin-mediated cell adhesion. Reference: Hybridoma 1: 99-108, 1982. Submitted by: R.C. Schoen, K. Bentley and R.J. Klebe, University of Texas, Health Science Center, San Antonio, TX.

ATCC CRL 1640 SJK-132-20 (Anti DNA polymerase α)

Current medium for propagation: Dulbecco's modified Eagle's medium with 4.5 g/L glucose, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma secretes monoclonal IgG<sub>1</sub> antibodies which react with DNA polymerase  $\alpha$  (titre: 4 ng bind 50% of 1 unit DNA polymerase  $\alpha$  activity). SJK-132-20 exhibits neutralizing activity against DNA polymerase  $\alpha$  with a titre of 25 ng. This hybridoma was formed by fusing NS-1 plasmacytoma cells with spleens from (BALB/c × C57BL/6)F<sub>1</sub> mice which had been immunized with polymerase  $\alpha$  Fraction VIII. References: J. Biol. Chem. 257: 8386-8390, 1982; ibid., 257: 8391-8396, 1982. Submitted by: D. Korn, Stanford University School of Medicine, Stanford, CA.

Price Code: J

ATCC CRL 1644 SJK-287-38 (Anti DNA polymerase α)

Current medium for propagation: Dulbecco's modified Eagle's medium, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma secretes monoclonal  $IgG_1$  antibodies which react with DNA polymerase  $\alpha$  (titre: 5 ng bind 50% of 1 unit DNA polymerase  $\alpha$  activity). SJK-287-38 exhibits neutralizing activity against DNA polymerase  $\alpha$  with a titre of 60 ng. This hybridoma was formed by fusing NS-1 plasmacytoma cells with spleens from (BALB/c × C57BL/6) $F_1$  mice which had been immunized with polymerase  $\alpha$  Fraction VIII. References: J. Biol. Chem. 257: 8386-8390, 1982; *ibid.*, 257: 8391-8396, 1982. Submitted by: D. Korn, Stanford University School of Medicine, Stanford, CA.

TCC CRL 1645 SJK-237-71 (Anti DNA polymerase α)

Current medium for propagation: Dulbecco's modified Eagle's medium, 90%; fetal bovine serum, 10%. Additional Information: This hybridoma secretes monoclonal  $IgG_1$  antibodies which react with DNA polymerase  $\alpha$  (titre: 7 ng bind 50% of 1 unit DNA polymerase  $\alpha$  activity). SJK-237-71 exhibits n neutralizing activity against DNA polymerase  $\alpha$ . This hybridoma was formed by fusing NS-1 plasmacytoma cells with spleens from  $(BALB/c \times C57BL/6)F_1$  mice which had been immunized with polymerase  $\alpha$  Fraction VIII. References: J. Biol. Chem. 257: 8386-8390, 1982; ibid., 257: 8391-8396, 1982. Submitted by: D. Korn, Stanf rd University School of Medicine, Stanford, CA.